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During the production process the upper is typically formed around a forming last in a first manufacturing step and then the sole is injection moulded onto a base insole of the upper in a second manufacturing step. The forming last provides a template for the three-dimensional size and shape of the upper. Accordingly, the first step involves mainly shaping and stitching operations. As there is generally no heating involved in this step the last can be made from a variety of materials. Wood and metal have traditional been used, and more recently plastic. Plastic is particularly preferred in lasts today because it is easy to form into the desired shape and is also relatively inexpensive.

[On page 3, starting at line 27 please rewrite the paragraph as follows.]

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Desirably, the step of heating the forming last before and/or during the moulding step is by means of a heating device located within the body.

[On page 7, starting at line 29 please rewrite the paragraph as follows.]

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Returning to Fig. 1, the apparatus (1) broadly includes a plurality of lasts (5) mounted in spaced apart relation around the periphery of a turntable (6). A number of stationary workstations (7) complementary to the number of lasts (5) are positioned radially outward of and adjacent to the turntable (6). The lasts (5) move with the turntable sequentially through each of the workstations (7) as the turntable (6) is rotated. The sole of the shoe (2) is progressively formed in discrete fabrication steps on each last (5) as the lasts move sequentially through the separate workstations (7).

[On page 9, starting at line 20 please rewrite the paragraph as follows.]

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The formation or manufacture of an upper (3) for an item of footwear typically involves cutting, shaping, and stitching of a flexible material, such as real or imitation leather, around the body (8) of the forming last (5). The formation of the upper (3) takes place predominantly at

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room temperature and occurs throughout a series of separate operations. Once the shoe upper (3) is completed, the last (5) with the formed upper thereon, is mounted on the apparatus (1) and is moved to a workstation (20) specifically designed for injection moulding of a rubber sole (4) onto the upper.

[On page 12, starting at line 9 please rewrite the paragraph as follows.]

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In the first step the outsole (4a) is moulded with the dummy last (28) in position in the mould cavity (22). In the second step the mid-sole is formed with the last (5) and the shoe upper (3) in the mould cavity. It is the second step therefore which physically attaches the rubber sole (4) to the fabric base insole of the upper (3).

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[On page 12, starting at line 15 please rewrite the paragraph as follows.]

A major advantage of the method described above is that the lasted upper (3) does not need to be transferred from a last for forming the upper to a vulcanising last designed for the moulding process. Accordingly, the manufacturing process is substantially more streamlined, more efficient and cheaper. The end product is also arguably of superior quality. In the very competitive footwear industry, lower production cost is significant.

IN THE CLAIMS

Please amend claim 21, add claims 41-54, and cancel claims 22-40, without prejudice as follows. Applicant also attaches a marked-up copy of amended claim 21, with additions underlined and deletions bracketed.

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21. (Amended) A method of making an item of footwear, the method comprising the steps of:

forming an upper for the item of footwear on a forming last, the forming last including a body having the general shape of a foot around which the upper of the

footwear item is formed in a series of separate operations, the last body having a base corresponding to a sole of the foot shape;

mounting the last on an apparatus for moulding a rubber sole;

moving the last with the formed upper thereon to a moulding workstation of the apparatus; and

moulding a rubber sole onto the formed upper while it is still mounted on the forming last, the forming last being heated before and/or during the moulding step,

wherein the step of heating the forming last includes heating the base of the last body, whilst substantially preventing the heating of parts of the body other than the base.

Sub 6 41. (New) A method as claimed in claim 21, wherein the step of forming the upper on the last in said series of operations includes providing the upper with a base to which the rubber sole is to be attached.

B7 42. (New) A method as claimed in claim 21, wherein the step of moving the last with the formed upper thereon to a moulding workstation comprises rotating a turntable of the apparatus on which the last has been mounted.

43. (New) A method as claimed in claim 21, further including the steps of:
moving the last sequentially through a plurality of separate workstations on the apparatus, and performing fabrication operations at each of the work-stations, wherein said moulding workstation is one of said plurality of separate workstations.

Sub F 44. (New) A method as claimed in claim 21, wherein:
the base of the last includes at least one metal plate member extending at least partially over the base of the last body to which heat is transmissible from heating means located within the last, such that the step of heating the forming last comprises heating the at least one metal plate member; and

the last includes insulation means between the at least one metal plate member and the rest of the last body to substantially prevent heating of parts of the body other than the base.

45. (New) A method as claimed in claim 44, wherein the heating means includes at least one electrically activated heating element located inside the last adjacent an inner surface of said at least one plate member, and the step of heating the base of the last includes activating the at least one heating element.

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46. (New) A method as claimed in claim 45, wherein the forming last includes an electric terminal at a top surface thereof for electrically connecting the at least one heating element to a power supply, and wherein the step of mounting the last on the apparatus includes engaging the terminal in a bayonet type coupling to connect the heating elements to the power supply.

47. (New) A method as claimed in claim 21, wherein the last body includes a heel portion and a toe portion, the heel portion and the toe portion being separable from one another, the method including the step of separating the heel portion and the toe portion of the last to facilitate removal of a finished item of footwear.

48. (New) A method as claimed in claim 21, wherein the step of moulding the rubber sole includes:

placing the last with the upper thereon adjacent a mould assembly having a plurality of mould parts;

arranging the mould parts adjacent the base of the last and the upper thereon to define a mould cavity for the rubber sole;

injecting rubber into the cavity; and

applying heat and pressure to the rubber in the cavity to form the sole in adherence with the upper.

49. (New) A method as claimed in claim 48, including the step of heating the mould parts at least one of before and during formation of the rubber sole to vulcanise the rubber.

50. (New) A last for making an item of footwear, the last comprising:

a generally foot-shaped body around which an upper of the item of footwear is to be formed through a series of separate operations, the last body being formed predominantly of plastic;

a base corresponding to a sole of the foot shaped body, the base including at least one metal plate member extending at least partially over the base;

means for heating said at least one metal plate member; and

insulation means between said at least one metal plate member and the last body for substantially preventing heating of said last body;

wherein the last is adapted to be mounted on an apparatus for moulding a rubber sole onto a base of the formed upper while the formed upper is still mounted on the last, and wherein said at least one metal plate member is adapted to be heated at least one of before and during moulding of the rubber sole.

51. (New) A last as claimed in claim 50, wherein the heating means includes at least one electrically activated heating element located inside the last body adjacent an inner surface of said at least one plate member.

52. (New) A last as claimed in claim 51, further including an electric terminal at a top surface of the last body for electrically connecting the at least one heating element to a power supply in a bayonet type coupling when the last is mounted on the apparatus.

53. (New) A last as claimed in claim 50, wherein the last body is made predominantly from polyethylene.

B7 54. (New) A last as claimed in claim 50, wherein the last body includes a heel portion and a toe portion, the heel portion and the toe portion being separable from one another to facilitate removal of a finished item of footwear from the last.

REMARKS

In response to the Office Action mailed July 8, 2002, Applicant respectfully requests reconsideration. Claim 21 has been amended. New claims 41-54 have been added. Claims 22-40 have been canceled. No new matter has been added.

Restriction Requirement

The Applicant hereby affirms the election to prosecute the inventions of Group I, claims 21-23, without traverse. Thus, Applicant hereby cancels claims 24-40. The Applicant has added new apparatus claims, 50-54, which should be grouped with the method claims of Group I so as to avoid any additional restrictions. In this respect, it is believed that all new and amended claims are within the same field of search as claims 21-23.

Claim Rejections – 35 U.S.C. § 112

Claims 21-23 are rejected as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards the invention. Claim 21 has been amended to delete the phrase “such as a shoe or a boot,” to overcome the rejection as indicated in the Office Action.

Claim Rejections – 35 U.S.C. § 102(b)

Claim 21 is rejected as being anticipated by U.S. Patent No. 2,878,523 (“Hardy”). This rejection is traversed.

Claim 21 is directed to a method of making an item of footwear and has been amended to recite, *inter alia*, that the upper is formed in a series of separate operations and that the last with the upper formed thereon is moved to a moulding workstation of the apparatus.